

U.S.S.N. 09/864,013

In The Claims

1. (Original) A field emission display panel comprising:
a first electrically insulating plate;

a plurality of emitter stacks formed on said first electrically insulating plate, each of said emitter stacks being positioned parallel to a transverse direction of said first insulating plate and comprises a layer of a first electrically conductive material having a first width and a layer of nanotube emitter having a second width on top, said second width being less than $3/4$ of said first width;

a second electrically insulating plate positioned over and spaced-apart from said first electrically insulating plate having an inside surface facing said first plate;

a layer of a second electrically conductive material on said inside surface of said second insulating plate;

a multiplicity of strips of fluorescent powder coating on said second electrically conductive material each for emitting a red, green or blue light upon activation by electrons emitted from said plurality of emitter stacks; and

U.S.S.N. 09/864,013

a plurality of side panels joining peripheries of said first and second electrically insulating plates together forming a vacuum-tight cavity therein.

2. (original) A field emission display panel according to claim 1, wherein said second width of said layer of nanotube emitter being between about 1/4 and about 3/4 of said first width of said layer of first electrically conductive material.

3. (original) A field emission display panel according to claim 1, wherein said second electrically insulating plate further comprises a black matrix layer in-between said multiplicity of strips of fluorescent powder coating.

4. (Previously cancelled)

5. (original) A field emission display panel according to claim 1, wherein said layer of a first electrically conductive material is a cathode for said field emission display panel.

U.S.S.N. 09/864,013

6. (original) A field emission display panel according to claim 1, wherein said layer of a first electrically conductive material is a silver paste.

7. (original) A field emission display panel according to claim 1, wherein said layer of second electrically conductive material is a first anode for said field emission display panel.

8. (original) A field emission display panel according to claim 1, wherein said layer of second electrically conductive material is formed of indium-tin-oxide (ITO).

9. (original) A field emission display panel according to claim 1, wherein said layer of nanotube emitter being formed of a mixture of nanometer dimensioned hollow tubes and a binder material.

10. (original) A field emission display panel according to claim 1, wherein said layer of nanotube emitter being formed of a mixture of nanometer dimensioned hollow tubes of carbon, diamond or diamond-like carbon and a polymeric-based binder.

U.S.S.N. 09/864,013

11. (original) A field emission display panel according to claim 1, wherein each of said multiplicity of strips of fluorescent powder coating emits a light of red, green or blue that is different than the light emitted by its immediate adjacent strips when activated by electrons from said plurality of emitter stacks.

12. (original) A field emission display panel according to claim 1, further comprising a second layer of said first electrically conductive material formed on top of a plurality of rib sections for functioning as a second anode.

13. - 20. (previously cancelled)

21. (previously added) A field emission display panel comprising:

a first electrically insulating plate;

a plurality of emitter stacks formed on said first electrically insulating plate, each of said emitter stacks being positioned parallel to a transverse direction of said first insulating plate and comprises a layer of a first electrically conductive material having a first width and a layer of nanotube

U.S.S.N. 09/864,013

emitter having a second width on top, said second width being less than $3/4$ of said first width;

a second electrically insulating plate positioned over and spaced-apart from said first electrically insulating plate having an inside surface facing said first plate, said first and second electrically insulating plates are formed of a ceramic material that is substantially transparent;

a layer of a second electrically conductive material on said inside surface of said second insulating plate;

a multiplicity of strips of fluorescent powder coating on said second electrically conductive material each for emitting a red, green or blue light upon activation by electrons emitted from said plurality of emitter stacks; and

a plurality of side panels joining peripheries of said first and second electrically insulating plates together forming a vacuum-tight cavity therein.

22. (previously added) A field emission display panel according to claim 21, wherein said second width of said layer of nanotube emitter being between about $1/4$ and about $3/4$ of said first width of said layer of first electrically conductive material.

U.S.S.N. 09/864,013

23. (previously added) A field emission display panel according to claim 21, wherein said second electrically insulating plate further comprises a black matrix layer in-between said multiplicity of strips of fluorescent powder coating.

24. (previously added) A field emission display panel according to claim 21, wherein said layer of a first electrically conductive material is a cathode for said field emission display panel.

25. (previously added) A field emission display panel according to claim 21, wherein said layer of a first electrically conductive material is a silver paste.

26. (previously added) A field emission display panel according to claim 21, wherein said layer of nanotube emitter being formed of a mixture of nanometer dimensioned hollow tubes and a binder material.

U.S.S.N. 09/864,013

27. (previously added) A field emission display panel according to claim 21, wherein said layer of nanotube emitter being formed of a mixture of nanometer dimensioned hollow tubes of carbon, diamond or diamond-like carbon and a polymeric-based binder.

28. (previously added) A field emission display panel according to claim 21, further comprising a second layer of said first electrically conductive material formed on top of a plurality of rib sections for functioning as a second anode.